

LIVSHITS, L.S., doktor tekhn. nauk; SITNOVA, N.V., inzh.

Corrosion resistance of 1Kh18N9T steel joints welded in carbon dioxide. Svar. proizv. no. 428-31 Ap '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh trub provodov.

ABRAMSON, Ye.S.; SITHOVA, V.K.

Effectiveness of metazide treating some clinical forms of tuberculosis
in children. Khim. i med. no.14:95-101 '60. (MIRA 14:12)

1. Respublikanskaya detskaya tuberkuleznaya bol'nitsa (glavnnyy
vrach Ye.F. Veryugina), Riga.
(TUBERCULOSIS) (METAZIDE)

Country : USSR
Category : Soil Science. Fertilizers. General. J
Abs Jour : RZhBiol., No 6, 1959, No 24643
Author : Shmelev, V.; Sitnyanskiy, V.
Inst : Voronezh State Pedagogical Institute.
Title : The Analysis of the Soils' Acidity and of the
Fertilizers' System in the Under-Patronage
Collective Farm "Stalin Put'" in Gremyachen-
skiy Rayon of Voronezhskaya Oblast.
Orig Pub : Sb. stud. rabot. Voronezhsk. gos. ped. in-t,
1957, vyp. 2, 33-36
Abstract : No abstract.

Card : 1/1

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550920002-7

GONTOVENKO, N.P.; ROZENBERG, Yu.G.; ZAMALIN, P.S.; TSUKERMAN, S.I.;
GONTARENKO, I.F.; SITNYANSKIY, V.D.; MARKMAN, L.L.

Smelting of pig iron in a coke gas cupola furnace. Prom. energ.
15 no.8:14-16 Ag '60. (MIRA 15:1)

(Cupola furnaces)
(Coke-oven gas)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550920002-7"

SITNYUK, S. N.

ZOZULYA, V. N.; KOZUBOV, A. S.; LOSKUTOVA, R. F.; CHERNOZHUKOV, K. N.;
YAROSHENKO, P. D.. Prinimal uchastiye: SITNYUK, S.N.. KOLOKOLOV,
V. S., prof., red.

[Chinese-Russian dictionary of scientific and technical terms]
Kitaisko-russkii slovar' nauchnykh i tekhnicheskikh terminov.
32000 terminov. Pod red. V. S. Kolokolova. Moskva, In-t nauchn.
informatsii Akad.nauk SSSR, 1959. 568 p. (MIRA 13:2)
(Chinese language--Dictionaries--Russian)
(Science--Dictionaries)
(Technology--Dictionaries)

MICHALOWICZ, Roman; SITO, Aldona

Some problems connected with the etiopathogenesis and diagnosis
of anorexia nervosa. Pediat. Pol. 40 no.6:565-569 Je '65.

l. Z Kliniki Terapii Chorob Dzieci AM w Warszawie (Kierownik:
prof. dr. med. H. Zapasnik-Kobierska).

ZAPOL'SKIY, I.A.; SITO, I.F.

Unwinding the cocoons of a pernyi silkworm. Tekst.prom. 17 no.2:
63-64 F '57. (MLRA 10:2)

1. Starshiy inzhener-tehnolog Kiyevskogo melkovogo kombinata (for
Zapol'skiy). 2. Nachal'nik planovogo otdela Kiyevskogo melkovogo
kombinata (for Sito).
(Silk manufacture)

USSR/Microbiology. General Microbiology

F

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57451

Author : Sitoko I. A.

Inst : Not given

Title : Effect of the Composition of the Nutritive Medium on the Antigenic Properties of Nonagglutinable Dysentery Strains

Orig Pub : Voen.-med. zh., 1957, No 7, 47

Abstract : Nonagglutinable dysentery strains when cultivated for a period of 24 hour on a semiliquid medium with mannitol acquire the ability to agglutinate with polyvalent and type specific dysentery sera. When the corresponding cultures with the mannitol medium are reseeded on other media their agglutinability is again lost.

Card 1/1

11

IVANOV, I.D.; IL'INA, T.K.; SITONITE, Yu.P.

Current views on the mechanism of biological fixation of molecular
nitrogen. Mikrobiologiya 33 no.3:540-547 My-Je '64.
(MIRA 38:12)

I. Institut mikrobiologii AN SSSR, Moskva. Submitted January
27, 1964.

SITOV, V.

USSR

"The Clean-up Campaign in South Urals Industry,"
Pravda, June 27, 1949

Current Digest of the Soviet Press, Vol. 1
No. 27, 1949, page 49. (In █ Library)

SITOV, V.I., inzhener (g.Serpukhov)

Installation of crossings in the Moscow Basin section of the
Stavropol-Moscow gas pipeline. Stroi.pred.neft.prom. 1 no.3:
17-19 My '56. (MIRA 9:9)
(Moscow Basin--Gas, Natural--Pipelines)

1927 Oct. V. I.

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Topic	Date	Speaker
Outline of the Development of the Law (Cont.)	8/7/1965	
- Mr. Edward A. G. Powers: Condition and Prospects for Diversified Pipelines in Supplying Natural Gas and Petroleum Pipelines	209	
- Mr. W. H. Johnson: Inadequate or Increasing the Take-Off in Texas Pipelines	210	
- Mr. E. P. Sauer: Organizing the Supply of Large Pipelines	211	
- Mr. R. J. Anderson: Method of Large Pipelines in Creating Markets, e.g., Chicago, and Illinois	212	
- Mr. C. L. Johnson: Planning and Service Pipelines by Compressed Air	213	
- Mr. V. L. Oberlin: of Translantic Materials and Methods of North Sea Pipelines in Establishing International Gas Pipelines	214	
- Mr. W. H. Johnson, Jr.: Operational Set-up and Characteristics Due to Trans- portation Costs	215	

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550920002-7"

SITOVA, N.M.

S/148/61/000/009/002/012
E071/E135

AUTHORS:

Bektursunov, Sh.Sh., Yavovskiy, V.I., Chernega, D.F.,
Tyagun-Belous, G.S., and ~~Sitova, N.M.~~

TITLE:

The behaviour of hydrogen during electroslag heating
and supplementary feeding of ingots

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya
metallurgiya, no.9, 1961, 44-53

TEXT: The authors carried out experiments on electroslag
heating and supplementary feeding of 8.2 ton sheet on electroslag
alloy steel MK 10Г2СД (10G2SD) on a large scale experimental
installation in which samples of the metal and slag were taken
during the course of crystallisation of the ingots for the
determination of hydrogen. The chemical composition of the steel
was: $\leq 0.12\%$ C; 1.3-1.65% Mn; 0.8-1.1% Si; $\leq 0.30\%$ Cr;
 $\leq 0.30\%$ Ni; 0.15-0.30% Cu; 0.02% Ti; $\leq 0.040\%$ S and P. The
process was carried out as follows: After filling the mould up to
about one third of the height, a slag forming mixture was placed
on the surface of the metal; 10-12 min after filling the mould,
three electrodes were introduced into the slag, current (55-60 V,

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The behaviour of hydrogen during ... S/148/61/000/009/002/012
E071/E135

1000-1400 A) was switched on and an additional amount of the slag forming mixture added so as to form a slag bath 80-100 mm deep. The duration of heating and supplementary feeding was 60-65% of the time necessary for the complete crystallisation of the ingot in normal production (about 2 hours). The slag forming of the ingot consisted of 40 kg chamotte powder, 60 kg lime and 10 kg spar concentrates. The slag formed had the following composition: 26-28% SiO₂; 38-40% CaO; 16-18% Al₂O₃; 1.0-1.5% FeO; 0.2-0.6% Fe₂O₃; 1.0-1.3% MnO; 5.0-7.0% MgO; 6-8% CaF₂; 0.02-0.03% P₂O₅; and 0.006-0.010% S. The lining of the top was made from magnesite brick. Samples of the metal were taken from the shrinkage head with a silica tube and samples of the slag from the space between the central and peripheral electrodes with a metallic spoon. The extraction of the gas from the metal, four transverse and one longitudinal templets were cut from three ingots (one of the ingots seemed by the usual technology was used for comparison). It was found that in the shrinkage head and 100 mm below the head, the content of hydrogen

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The behaviour of hydrogen during ...

in the ingots teemed with the heating was somewhat lower than in the usual ingots; in the remaining parts of all three ingots the hydrogen content was approximately the same. The average hydrogen contents were as follows: in the usual ingots $4.98 \text{ cm}^3/100 \text{ g}$; in the ingot teemed with electroslag supplementary feeding $4.05 \text{ cm}^3/100 \text{ g}$; in the ingot teemed with electroslag heating $4.09 \text{ cm}^3/100 \text{ g}$. It is concluded that electroslag heating or supplementary feeding of the head of the ingots secures the transfer of some of the hydrogen from the metal to the slag, thus lowering somewhat the concentration of hydrogen in the whole system of the ingots but particularly in their head part. The transfer of hydrogen into the slag bath takes place not only due to the Perrin-Tochinskiy effect, but also due to the electrolytic transfer of OH^- ions and their discharge on electrodes during the half period when the electrodes are acting as anodes. O.A. Yesin, V.I. Yavoyskiy, G.N. Batalin and V.S. Baykov are mentioned for their contributions in this field.

There are 7 figures and 13 references: 11 Soviet-bloc and 2 Russian translations of non-Soviet publications.

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Card 3/4

The behaviour of hydrogen during ... S/148/61/000/009/002/012
E071/E135

ASSOCIATION: Moskovskiy institut stali, Kiyevskiy politekhnicheskiy
institut, Institut elektrosvarki, Zhdanovskiy
metallurgicheskiy zavod
(Moscow Steel Institute, Kiyev Polytechnical Institute,
Electrowelding Institute, Zhdanov Metallurgical Works)

SUBMITTED: May 23, 1961

Card 4/4

SITCOVA, V.A.

1. SYTOVA, V. A.

2. USSR (600)

4. Corals, Fossil - Ural Mountains

7. Corals of the family Kypophylidae from the Upper Dilurian of the Urals. Trudy Paleont.inst., no. 40, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SITOVА, V.A.

~~SITOVА, V.A.~~

Paleontological Section of the Moscow Naturalists' Society.
Paleont. zhur. no.1:149 '59. (MIRA 13:1)
(Bibliography--Paleontology)

STANISLAVOV

137-1958-1-118

Translation from Referativnyy zhurnal Metallurgiya, 1958, Nr 1, p 18 (USSR)

AUTHORS: Myakon'kikh, V. K., Sitovskiy, A. A.

TITLE: Experiences in the Employment of the MPD-4 Washer at the
"Komsomolets" (Opyt ekspluatatsii promyvochnogo pribora
MPD-4 na priiske "Komsomolets")

PERIODICAL: Kolyma, 1957, Nr 5, pp 25-28

ABSTRACT: In the light of the experience of the crew of an MPD-4 washer,
a number of organizational and engineering measures are
suggested to improve work with washers.

A. Sh.

1. Ore washers--Operation 2. Ores--Processing--Equipment

Card 1/1

SITCWSKI, J.

The main objectives of the technological progress in industrial building in 1955.

p. 3 (Budownictwo Przemyslowe) Vol. 4, no. 5, May, 1955, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN 1958

SITOWSKI, Waclaw

Duodenum mobile. Polski przegl. radiol. 20 no.5:281-287
Sept-Oct 56.

1. Z pracowni Radiologicznej Szpitala Miejskiego Nr 6

Kierownik: dr. W. Sitkowski.

(DUODENUM, abnormalities,
mobile, x-ray (Pol))

The influence of betatron radiation... S/196/62/000/023/004/006
15 MeV betatron. The characteristics of polyethylene were not altered by a radiation dose of 10^5 rads (the measurements were made at about 10^9 c/s). The low-frequency $\tan \delta$ of plastic AG-4 (AG-4) increased (particularly after irradiation in the frequency range $10^5 - 10^8$ c/s) and at $-60^\circ C$ but the value did not alter. Evidently after irradiation under tropical conditions did not alter. Components of loss by conductivity and does not alter the resistive component of loss. Similar results were obtained for plastics K-114-35, K-211-3 and Φ KNM-25 (FKM-25). In the case of textolite with a silicoorganic binder CKM-1 (SKM-1), first increases the low-frequency $\tan \delta$ only up to about 10^5 rads and then diminishes it. Above 1200 rads/min the $\tan \delta$ steadily decreases. It is possible that with heavy dosages the $\tan \delta$ and high dosage rates a process of binding together reduces the $\tan \delta$. In the rates of 500 rads/min and a dosage of 10^5 rads cause a small increase in conductivity and $\tan \delta$ at 10^5 rads and $14R-15$. In the change disappears as temperature curves are being taken, but this shape of the reverse temperature curve coincides with that

Card 2/3

The influence of betatron radiation. S/196/62/000/023/004/006
E194/E155

for the non-irradiated material. Irradiation of varnishes K-47, 976-1, and MIM-16 (MGM-16) under various conditions caused no change in their electrical insulating properties. Irradiation of steatite ceramic (1% BaO, 91.6% Onot talc, 3.2% kaolin, 3.2% boracite) (with a dosage of 2×10^5 rads) did not alter the shape of the temperature curve of tan δ (measured at 10^7 c/s) either in weak fields (945 V/cm) or in strong (1890 V/cm). With a dosage of 2.12×10^7 rads, tan δ measured at 945 V/cm was not altered at low temperatures but increased appreciably at temperatures above 400 °C.

13 illustrations. 31 references.

[Abstractor's note: Complete translation.]

Card 3/3

VIMM. KheK. [Sveta, R.]

Determining the bed parameters of the Estonian oil shale deposit.
Khim. i tekhn. ger. slan. i prod. ikh perer no.13-43-55 '64.
(MIRA 18:9)

1960, Vars., Sloboda table, new, prof. Mihailo J. Djordjevic, and
Sloboda, Faculty of Science (University)

"Impediment of the electrical calculations of the operation
of a.c. power transmission lines. Electrification in 1960."
1960.

FEDOROV, Ye.I.; SEMENOV, V.Ye.; SITSINT, L.Ye.; VEREVKINA, A.M.

Analysis operation of the Bashkatovskoye underground gas storage.
Gaz. prom. 5 no.5:44-47 My '60. (MIRA 14:11)
(Kuybyshev--Gas, Natural--Storage)

ACC NR: AP6026777

SOURCE CODE: UR/0077/66/011/003/0187/0190

AUTHOR: Dubovik, A. S.; Sitsinskaya, N. M.

ORG: Institute of Earth Physics im. O.Yu. Shmidt ANSSSR (Institut fiziki zemli ANSSSR)

TITLE: High luminosity lens adaptor for the SFR system with unsymmetric objectives

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 11, no. 3,
1966, 187-190

TOPIC TAGS: optical equipment, high speed camera , high speed
camera adaptor, optical instrument /SFR high Speed camera

ABSTRACT: The high luminosity multi-lens adaptor was developed at the Institute of
Earth Physics (IFZ) ANSSSR to increase the speed of the reliable and popular high
speed SFR photographic camera. The system is capable of registering from 25,000 to
2,500,000 images per second, at a high optical quality of the image. The adaptor ex-
tends the range of photography to subjects of lower brightness. The multilens adap-
tor, 6 , is shown in Fig. 1, which depicts the SFR system schematically. The high

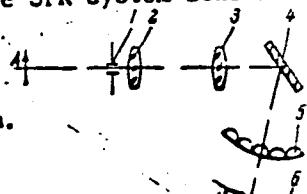


Fig. 1. Schematic of the SFR system.

UDC 788.37

Card 1/2

ACC NR: AP6026777

luminosity adaptor version differs from the original one in that the objectives are not symmetric with respect to their optical axes and are located in contact with each other, permitting the design of a twice higher aperture diaphragm. In practice it was found possible with the new adaptor to increase the relative opening of the instrument from f 1/16.7 to f 1/114 without an increase of the light passage dimensions of the other optical components of the SFR system. The resolving power of the optical system has not been decreased and is determined, in the main, by the image shift in the mirror reflection development. Some additional advantages of the new multilens adaptor are cited, mainly in its applications to shadowgraphs and to interference images.

SUB CODE: 14, 17/ SUBM DATE: 23Dec64/ ORIG REF: 003/ OTH REF: 001

Card 2/2

DUBOVIK, A.S.; SITSINSKAYA, N.M.

Using high-speed cameras together with shadowing. Prib.i tekh.eksp.
6 no.5:166-171 S-0 '61. (MIRA 14:10)

1. Institut khimicheskoy fiziki AN SSSR.
(Photography, High-speed)

DUBOVIK, A. S., SPITSERSKAYA, N. M., ROLISOV, G. V.

"High Speed Image Dissection Microphotographic Camera C7Pf"

report presented at the 6th Intl. Cong. of High-Speed Photography,
The Hague, 17-22 Sep '62

S/077/63/008/002/005/009
A066/A126

AUTHORS: Dubovik, A.S., Sitsinskaya, N.M., Kolesov, G.V.

TITLE: The high-speed microphotographic scanner СФР-Р (SFR-R)

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 8, no. 2, 1963, 128 - 134

TEXT: The device described here was developed from the high-speed photo-recorder СФР (SFR). The optical system was replaced by a microphotographic scanning system (Fig. 3). An image of object (A) is formed in the scanning plane by using microscope (1). By objective (5) and rotating mirror (6) the scanning-pattern image is transferred into focal arc (7) on a scale of 1 : 1. The microscope gives magnifications of from 7 to 120 power. By using a Kerr shutter it is thus possible to obtain 10 to 100 million frames per sec. As the recording time is 10 times longer than the duration of the effects under examination, it is possible to film even very rapid processes without difficulty. Collimators (3) were developed, which form scanning-pattern images in the focal arc without defocusing. There are 5 figures and 1 table.

Card 1/2

SITSKAYA, K.V., aspirant

Study of the electrical activity of muscles in using the
arm prosthesis constructed by the Central Scientific
Research Institute of Prostheses and Prostheses Construction.
Protez. i protezostr. no.10:41-53 '64.

(MIRA 18:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut
protezirovaniya i protezostroyeniya.

SITSKIY, A. P.

Rotov, V. I., Iv'novskiy, I. G., Sits'kiy, A. P., and Sesonov, P. K. "Experimenting with the activity of the serum against swine plague prepared with the application of C₆C₁₂ stimulator," Sbornik trudov Kfr r'k. vet. in-ta, Vol. XIX, Issue 2, 1948, p. 153-60, - Bibligr: p. 159-60

SO: U-1924, 20 Oct 53, (Letopis 'Zhurn. i 'nykh Statей, No. 16, 1949).

USSR / Virology. Human and Animal Viruses.

E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43067.

Author : Likhachev, N. V., Sitskiy, A. P.

Inst : Not given.

Title : Improvement of Crystal-Violet Vaccine Against Hog Cholera.

Orig Pub: Tr. Gos. nauchno-kontroln. in-t po vetpreparatam,
1956, 6, 30-44.

Abstract: To the vaccine 20% of purified glycerine and 1.5% aluminum hydroxide were added, and the period of inactivation at 37° was shortened from 20 to 10-14 days; in this way the vaccine activity was increased. A hypodermic injection of 5 ml of this vaccine to piglets with a live weight of 50 kg and more created a stable immunity for a period no less than 6 months; a vaccine with aluminum hydroxide

Card 1/2

6

SITSKII, A. P., KALUGIN, V. I., GÓRZHKOVSAYA, S. I., TERENT'YEV, F. A., and
VASIL'YEV, K. M. (Moscow Technological Institute of the Meat and Milk Industry).

"Obtaining and applying concentrated hyperimmune sera."

Veterinariya, Vol. 38, No. 2, 1961, p. 43.

TERENT'YEV, F.A.; VASIL'YEV, K.M.; SITSKIY, A.I.; KALUGIN, V.I.; GORZHKOVSAYA,
S.I.

Obtaining antis using condensed hyperimmune serums. Veterinariia 38
no.2:43-45 F '61.
(MIRA 18:1)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy pro-
myshlennosti.

KASHINTSEVA, N.S.; GIL'GUT, Ye.A.; VOLGIN, Yu.B.; VASIL'YEVA, I.V.;
SITSUKOVA, Z.Ya.

Study of the sensitizing properties of tetanus toxoids in experiment.
Report No.1; Zhur.mikrobiol.epid.i immun. 32 no.1:126-129
(MIRA 14:6)
Ja '61.

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

(TETANUS) (ALLERGY)

KASHINTSEVA, N. S.; GIL'GUT, Ye. A.; VOLGIN, Yu. B.; VASIL'YEVA, I. V.;
SITSUKOVA, Z. Ya.

Experimental study of the sensitizing properties of tetanus
anatoxins. Report No. 2. Zhur. mikrobiol., epid. i immun. 32
(MIRA 15:7)
no.8:132 Ag '61.

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

(TETANUS)

KASHINTSEV, N.S.; GIL'GUT, Ye.A.; VOLGIN, Yu.B.; VASIL'YEVA, I.V.;
SITSUKOVA, Z.Ya.

Experimental study of the sensitizing properties of tetanus toxoids.
Report No.2. Zhur. mikrobiol., epid. i immun. 32 no.9:135 S '61.
(MIRA 15:2)

1. In Institutu epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(TETANUS)

KASHINTSEVA, N.S.; GIL'GUT, Ye.A.; SITSUKOVA, Z.Ya.

Study of the sensitizing properties of tetanus antigens under experimental conditions. Report No.4: Passive sensitization. Specificity of the phenomenon of sensitization. Repeated desensitization. Zhur.mikrobiol., epid. i immun. 32 no.10: 117-122 O '61. (MIHA 14:10)

1. Iz Instituta epidemiologii i mikrobiologii im. Gamalei AMN SSSR.
(TETANUS) (ANTIGENS AND ANTIBODIES)

KASHINTSEVA, N.S.; GIL'GUT, Ye.A.; SITSUKOVA, Z.Ya.

Study of the sensitizing properties of tetanus antigens in an experiment. Report No. 5: Detection of the sensitizing properties of a purified sorbed tetanus anatoxin. Zhur.mikrobiol., epid.i immun. 32 no.12:100-105 L '61. (MIRA 15:11)

l. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR.

(TETANUS ANTITOXIN)

SITTER, Pavel

Exhibition of the use of technical standardization in the bag production. Normalizace 12 no.10:285-283 0 '64.

A new motion picture on technical standardization. Ibid.: 285-286

1. Ministry of Consumer Goods Industry, Prague.

SITTER, Pavel

Standards applied in the bagmaking industry. Kozarstvi 12 no.12:
374-376 D '62.

1. Zavody A.Zapotockeho, n.p., Jaromer.

SITTEK, Pavel

Symposium on technical standardization in the consumer goods
industry. Brno 19 no.6:313-314 Ag '64

1. Ministry of Consumer Goods Industry, Prague.

SITTLER, EDWARD

Determination of ϵ -caprolactam in its polymer by the Kjeldahl method. Pavel Čefelin and Eduard Sittler (Vysoká škola chem.-technol., Prague). *Chem. listy* 51, 1320-21 (1957).—The Kjeldahl method is suitable for detg. the content of ϵ -caprolactam (I) in aq. solns. as well as in the polycaprolactam (II). A 25-ml sample contg. 0.03 g. I is evapd. in a 300-ml. Kjeldahl flask with 10 ml. concd. H_2SO_4 until white fumes of H_2SO_4 evolve, and 3 g. of a catalyst prepd. by mixing 90 parts K_2SO_4 , 5 parts V_2O_5 , and 2 parts black Se is added. The flask is heated with a Teclu burner having a flame 13 mm. in diam. and 50–60 mm. high at a distance of 40 mm. from the gauze. The mixt. is alkalized with 90 ml. 30% NaOH and the NH₃ distd. 10 min. into 50 ml. of 0.01N H_2SO_4 contg. 2 drops of a soln. of 0.033 g. methylene blue and 0.125 g. methyl red in 100 ml. 95% EtOH, and the excess acid is titrated with 0.01N NaOH. To det. I in II, II (7.5 g.) is dissolved in concd. H_2SO_4 (210 ml.), the soln. dild. to 1 l. with H₂O, a 40-ml. aliquot is treated with 75 ml. H₂O (after washing the pipet with 8 ml. 30% H_2SO_4), the pptd. II is filtered off through a blue-band filter, washed 3 times with hot H₂O, and the filtrate worked up as described.

M. Hudlický

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2 may

CZECHOSLOVAKIA/Analytical Chemistry. Analysis of Organic
Substances.

E-3

Abs Jour: Ref Zhur-Khim., No 13, 1958, 43101.

Author : Cafelin Pavel, Sittler Eduard.

Inst :

Title : Quantitative Determination of Epsilon-Caprolactam
in Polymer by the Kjeldahl Method.

Orig Pub: Chem. listy, 1957, 51, No 7, 1320-1322; Collect.
Czechosl. chem. commun., 1958, 23, No 3, 422-425.

Abstract: For a quantitative determination of epsilon-capro-
lactam (I) by the Kjeldahl method the sample is
digested over a small flame with concentrated H₂SO₄
in the presence of 2 g of catalyst consisting of
90 parts K₂SO₄ : 5 parts V₂O₅: 2 parts Se black
(other catalysts are not suitable) for 15-45 minutes,

Card : 1/2

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CZECH/8-52-11-8/38

AUTHORS: Wichterle, O., Sittler, E., and Gofolin, F.
MATERIAL: Study of the Equilibrium in Alkaline Polymer-amine-EAC

TITLE: 6-Caprolactam (Study rovných alkalicke purjí - 6-kaprolakmu)

PERIODICALS: Chemické Listy, 1958, Vol. 52, No. 1, pp. 207-210

ABSTRACT: The work concerns the determination of the equilibrium conversion and the average degree of polymerisation of polymeric β -caprolactam, prepared by alkaline catalysis. The conversion and degree of polymerisation dependence on temperature was established, as well as their dependence on amount and type of catalyst. On the whole, new results have been published in the main. In addition, a few works have been published in the literature.

of caprolactam. In this alkaline polymerisation, mainly systematic study of its industrial utilisation starts from the point of view of the kinetics of polymerisation shortly after the alkaline or the kinetics of polymerisation. All imports so far on the alkaline of the reaction. All imports stress the need to exclude polymerisation of caprolactam. The author has made a detailed study of the system butanol- O_2 -caprolactam water, readily from the system butanol- O_2 -caprolactam.

quantitative examination of the influence of water on the course of alkaline Polymerisation.

Experimental.—Substances Used: The β -caprolactac used was purified by three recrystallisations of the technical product from acetone and iron. Chloroform-free because it was dried, first of all, at 50°C and 12 mm Hg for 2 hr, then at 2-5 mm for 48 hours. The dried material was stored in a desiccator over KOH. Before weighing out 15 g was re-dried at 2-5 mm overnight.

Sodium ethylcarbonate was prepared by precipitating sodium ethylate from its solution in absolute alcohol by the passage of CO_2 . The precipitate, filtered off, was dried for

Several days at 2-5 mm over P_{205} in a desiccator.

Sodium Phenylacetate was prepared by the crystallisation from phenylacetic acid and then purified by crystallisation from a mixture of benzene and ethylalcohol and, after drying, preserved over P_2O_5 . Both catalysts were re-dried in vacuo at 10-12 mm for 12-16 hours at ordinary temperatures. Pure trimesic acid was obtained by two distillations of the residue, first with benzyl carbonate, and with barium carbonate.

crude product with zinc chloride was worked into the polymerisation. The catalyst was washed off the apparatus of the polymerisation apparatus of the originally dried adipole of the polyacrylate "Raffin" (described by Kralicek and Šebenda (Ref. 4) at the International Symposium on Lactone-Jeucular Chemistry, Prague, 1957). Communication Nr 131 with an accuracy of ± 0.1 kg. and to this was added the caprolactone with an accuracy of ± 0.01 kg. in such quantities as to give the required catalyst concentration. After setting up the apparatus and the sealing of the weighing tube, the contents were dried at $1-3$ °C and at normal temperature for 36-48 hours in a stream and the solution of the catalyst off the lower capillary and the absorption of lamp nitrogen with constant stirring in an atmosphere of the apparatus, with heating in a water bath at $80-90$ °C. The apparatus, with the stirrer fixed above the surface of the fusion mixture, was submerged with the lower adhesive parts in a salt bath for a given time and temperature. In the experiments with polymerisation time above six hours, the adipole was first fused at $1-4$ hours (according to the speed of decomposition

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550920002-7"

Czechoslovakia

Study of the Equilibrium in Alkaline Polymerization of α -Coproducts of the Catalyst so that a larger part of gaseous products might escape. In the polymerizations in the presence of water, the catalysts were weighed with an accuracy of 0.1 mg in thin tubes and calorimetrically the solution of the catalysts was placed in the ampoule and tube and ampoule were immediately sealed.

Determination of the Degree of Conversion. The degree of conversion was determined by the liquid-liquid method in the conversion determined by the ultracentrifuge method in the third of the polymer plug.

Determination of the Average Degree of Polymerization. The shavings of the polymer were placed in a Soxhlet apparatus with water for 16 hours. After extraction, the sample was dried for 36 hours at 50°C and to 15 mm. The extracted and dried polymer was weighed into 25 ml. volumetric flasks in amounts of about 0.15 g. trisulfuric acid (20 ml.) was added and dissolved with shaking (16–24 hours). After dissolution, the solution was equilibrated at 25°C and then filled up to the mark with tricresol. The solution of the viscometer was measured out in an Ubbelohde viscometer with capillary No. III. The solution of the cardanol was measured out in an Ubbelohde viscometer with capillary No. IV. The solution of the cardanol was measured out in an Ubbelohde viscometer with capillary No. V.

$$\boxed{1.347 \text{ GPa}} = 1 - 1$$

where $\eta_{sp}^0 = \eta_0 - 1$ and c is the concentration of the polymer ($\text{g}/100 \text{ ml. solution}$). This equation is well suited for the extent of the degree of polymerisation encountered in these experiments. The average degree of polymerisation was calculated from the internal viscosity according to Cannizaro's equation:

the equation $P = 92(1 - e^{-kt})$ was obtained for the course of polymerisation.

Results: The course of caprolactone polymerisation was measured at 160, 180, 200, 220, 240 and 250 °C and with a sodium ethyl carbonate concentration of 0.75 mol/l; further catalyst concentrations of 0.1, 0.5 and 1.0 mol/l were used at 240 °C. In usin sodium phenyl acetate as catalyst the largest concentration was 0.57 mol/l and a temperature of 220 °C. All polymerisations had, from the standpoint of the course of conversion, the same character and as an example the course of various polymerisations at different temperatures and catalyst concentrations are given (Figure 1). Linearity holds between the logarithm of the period required to establish equilibrium and temperature (Figure 2) and it is found that with pectolates the polymerisation occurs substantially slower than with ethyl carbonate. The final degree of polymerisation is temperature dependent in a manner similar to the equilibrium conversion, even though, in the region of the melting point there is no such sharp change (Figure 3) and further it (P) is a function of $(mol/l)^{-1/2}$ as with the polymerisation which is finally

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CZECH/B-52-11-B/30

Study of the Equilibrium in Alkaline Polymerisation of 6-Caprolactam

obtained must not be considered as the equilibrium one, because in the period in which this degree of polymerisation is established, transnucleation reactions occur which require catalysts for side reactions. In this, the final degree of polymerisation differs from the actual equilibrium system in the polymerisation with water. Polymer obtained by alkaline polymerisation is therefore actually "dead". It is possible to obtain with 1,4-correspondingly higher conversion or degree of polymerisation by keeping it at a definitely low temperature than that at which it was polymerised (Ref. 1). The final conversion value may correctly be considered as the equilibrium value, in the period when it contains constant conversion value, the transnucleation is still occurring as is shown by the change in the degree of polymerisation. The dependence of conversion and degree of polymerisation on the amount of water added is given (Figure 6).

It can be concluded that the more the water approaches an equimolar catalyst/water-catalyst ratio, the longer the period necessary to attain equilibrium.

Discussion: Absolute values for equilibrium conversion published for hydrolytic polymerisation and those obtained by the authors for alkaline polymerisation of 6-caprolactam may not be directly compared, for these results are dependent on the actual analytical method used. In both cases, the equilibrium conversion is exclusively a function of temperature and is concerned with the pure thermodynamic equilibrium between cyclic and linear molecular systems. The dependence of the conversion temperature has a similar character in both ways of polymerisation, of course, the course ascertained by the authors for the above mentioned function is more consonant with a marked gradient in the region of polymer melting. It is possible to explain this gradient if a gradual change of phase occurs during melting and that one equilibrium is valid for the crystalline portion and another for the amorphous fusion mixture. The time change of the degree of polymerisation attains a maximum shortly after the start of the reaction and then falls again. Grinblat (Ref. 5) claims that it is after polymerisation and Kraft (Ref. 6) found that

after a long period of polymerisation with sodium, the polymer attains a constant degree of polymerisation. This latter finding is supported by the authors' observations. On these grounds it is not possible to read off critically the shortest period in which the final degree of polymerisation is attained. The dead polymer obtained after 96 hours possibly shows traces of polymerisation activity; The gradual fall of the degree of polymerisation to a constant value, corresponding to the dead polymer, may only be explained by the fact that active anions disappear. The increasing degree of polymerisation with falling temperature is caused on the one hand by a slower decomposition of the catalyst and on the other by the reduced velocity of the degradation reaction. The catalytic "activity" probably depends on the basicity of the individual catalysts and does not, of course, have anything in common with the velocity of the polymerisation which is determined by the velocity of the initiating reaction decomposition of catalysts; artificially more "active" bases achieve, under the same conditions, a lower degree of polymerisation.

CZCH/8-52-11-8/30
Study of the Equilibrium in Alkaline Polymerisation of G-caprolactam.

By comparing results, it is possible to conclude that the presence of water leads to a slowing down of alkaline polymerisation (the reaction is longer than hydrolytic polymerisation) probably mainly as a result of the destruction of a definite portion of the catalyst but also as a result of the effect of other factors; in the molar excess of water content over catalyst content, perhaps hydrolytic polymerisation arte, of course, small because the degree of polymerisation is, in this case, basically determined by the amount of added water which as a result of saponification introduces irreversible end groups into the polymer. From this it is to be seen that the polymerisation is not only retarded but the course of the degree of polymerisation is altered. With amounts of water higher than equimolar, hydrolytic polymerisation occurs and this is caused by the excess of water. Water is utilised in the saponification of the lactam which proceeds until the ratio of water to catalyst reaches the ratio of 1/1.

There are 8 figures, 2 tables and 21 references, 9 of which are Czech, 1 Soviet and 2 Polish, 1 Japanese, 7 German and 1 English.

ASSOCIATION:
Laboratorium výskumu emulzních látaků, Československá akademie věd, Praha, 4 Katedra technologie plastických hmot, Vysoká škola chemicko-technologická, Praha (Laboratory for the study of emulsion polymers, Czechoslovak Academy of Sciences, Prague and Department for the Technology of plastic materials, Faculty of Chemical Technology, Technical University, Prague) (P)

SCHÄLER, E.

Distr: 4E2c(j)

The effect of alcohols on the anionic polymerization of ϵ -caprolactam. P. Čefelin, E. Sittler, and O. Wichterle (Vysoká škola chem.-technol., Prague). Collection Czechoslov. Chem. Commun. 24, 3287-90(1959).—In the presence of slightly volatile nics., the alk. polymerization of the ϵ -caprolactam takes place very slowly and the conversion and the degree of polymerization are substantially lower than the values usually obtained. The results are compared with those obtained in the presence of the water (C.A. 53, 3763b).

B. Erdős

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SITTER, E.

PHASE I BOOK EXPLOITATION

SOV/4984

International Symposium on Macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyj simposium po makromolekulyarnoj khimii SSSR, Moskva, 14-18 iyunya 1960 g.; dokladu 1 avtorskogo sekretarya III. (International Symposium on Macromolecular Chemistry) Held in Moscow, June 1-18, 1960. Papers and Summaries) Section III. (Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: P. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry, Moscow.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

CONTENTS: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of initiating polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

- | |
|--|
| Terlyov, V. M., A. N. Pravdinikov, and S. S. Nedvedova (USSR). The Effect of Formic Acid and Formates on the Oxidation of Hydrocarbons and Hydrocarbon Polymers 364 |
| Porozva, Z. V. and D. M. Yanovsky (USSR). Effect of Some Organic and Organometallic Compounds on the Thermal Degradation of Polyvinyl Chloride 372 |
| Wichterla, O., P. Blatler, and F. Bezelin (Czechoslovakia). Degradation of Poly-Caprolactam as a Result of Exchange Reaction Between Amide Bonds 380 |
| Kuferka, M., J. Linhart, and M. Velichka (Czechoslovakia). Neutralization of Residual Catalyst in Polydimethylsiloxane 388 |
| Leont'ev, M. B., B. M. Konstantinova, and N. N. Golubenkova, A. S. Tsvetkovskaya, and V. N. Slobatin (USSR). On the Degradation and Stabilization of Linear Polyesters 405 |
| Angert, L. O. and A. S. Kuz'minskij (USSR). Investigation of the Efficiency of Inhibitors of Rubber Oxidation at Various Temperatures 414 |
| Berlin, A. A., Ye. A. Penkava, and Ying Wen-k'ang (USSR). Mechanism of the Protective Action of Benzene Alugs During the Radiation of Polystyrene 423 |
| Zidensuk, A. A., and K. A. Andrianov (USSR). On the Radiochemical Stability of Side Groups in Polymers with Inorganic Chains of Molecules 433 |
| Vesinov, Yu. N., B. I. Avkhodzhev, and U. Arizon (USSR). Modification of the Properties of Cellulose by Grafting 444 |

NO 25

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S/081/62/000/001/067/067
B119/B101

J. J. G.

AUTHORS: Čefelin, P., Sittler, E., Wichterle, O.

TITLE: Production of mixed polyamides from amidines

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 574, abstract
1R52 (Collect. Czechosl. Chém. Comms., v. 25, no. 10, 1960,
2522 - 2529)

TEXT: Polyamides from three components of regular structure were obtained by heating (in N_2 atmosphere) equimolar amounts of the following diamidines and dicarboxylic acids: N,N' -di-[2'-(1'-azacycloheptenyl)]-ethylene diamine (I), -hexamethylene diamine (II), and -phenylene diamine (III), oxalic (IV), adipic (V), and terephthalic acid (VI). Data are given in the order: initial diamidine and acid, reaction time in hr, reaction temperature in $^{\circ}C$, melting point of the polyamide in $^{\circ}C$: I, IV, 20, 160, 125 - 127; I, V, 20, 240, 174; I, VI, 48, 240, 344 - 345; II, IV, 20, 160, 140 - 142; II, V, 48, 240, 175 - 176; I, VI, 48, 240, 272 - 277; III, V, 48, 240, 313 - 316; III, VI, 20, 240, unmeltable until $400^{\circ}C$. The polyamides from I and V, II and V, II and VI are suited for spinning; the

Card 1/2 X

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B119/B101

Production of mixed ...

other polyamides (except those with IV) form brittle fibers. Model reactions were conducted with monoamidines and monocarboxylic acids. When heating equimolar amounts of 2-methyl-amino-azacycloheptene and butyric acid with slowly increasing temperature (from 150 to 200°C during 1.5 hr in N₂ atmosphere), a product was obtained with a melting point of 177 - 178°C at 20 mm Hg, whose composition was similar to that of 6-butyramino-N-methyl caproamide. The reaction of equimolar amounts of 2-phenyl-aza-cycloheptene and benzoic acid (220°C, 3 hr, in N₂ atmosphere) yielded a product whose structure corresponded to that of 6-benzoylamino-N-phenyl caproamide; prisms with melting point 162 - 163°C (from a benzine-benzene mixture 1:1). No corresponding amide was isolated in the reaction of 2-phenyl-hydrazinaza-1-cycloheptene with benzoic acid. Analogously, the reaction of N,N'-di-[2'-(1'-azacycloheptenyl)] hydrazine with V and VI yielded no polyamide. The rate constants ($k_1 \cdot 10^3 \text{ sec}^{-1}$) of the reaction between II and V in the melt, at temperatures of 210, 220, 230, 240°C, were 1.08, 1.92, 2.83, and 4.49, respectively. This indicates that the reaction investigated proceeded by the ion mechanism. The activation energy was 23.3 kcal/mole. [Abstracter's note: Complete translation.]

Card 2/2

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SITTLER, E.

SURNAME, Given Names

Country: Czechoslovakia
Academic Degrees: [not given]
Affiliation: Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences (Institut fuer makromolekulare Chemie, Tschechoslovakische Akademie der Wissenschaften), Prague
Source: Prague, Collection of Czechoslovak Chemical Communications,
Vol 26, No 11, November 1961, pp 2897-2908
Data: "Degradation of Poly-6-Caprolactam by Reamidation."

Authors:

WICHTERLE, O
SITTLER, E
CEFELIN, P

SITTER, Pavel

Publications on technical standardization. Drevno 20 no.3:3 of cover
Mr '65.

1. Ministry of Consumer Goods Industry, Prague.

SITTER, Pavel

Books on technical standardization in the consumer goods
industry, published in 1964. Kozarstvi 15 no.2:67-68 F '65.

SYCHEV, M.M.; KRYLOV, O.S.; SITTNER, V.; ZAGAROVA, S.A.

Effect of the composition and structure of vitreous slags in
the system $\text{CaO} - \text{SiO}_2 - \text{FeO} - \text{Al}_2\text{O}_3$ and their binding properties.
Izv. AN SSSR. Neorg. mat. 1 no.11:2039-2043 N '65.

(MIRA 18:12)

I. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
Submitted May 10, 1965.

SOV/68-59-8-31/32

AUTHORS: Situlin, I.K. and Borisov, V.I.

TITLE: A Fluidised Bed Plant for the Production of Semicoke
in the Rumanian People's Republic (Ustanovka dlya polucheniya
polukoksa po metodu flyuidizatsii v Rumynskoy
Narodnoy Respublike)

PERIODICAL: Koks i khimiya, 1959, Nr 8, pp 61-64 (USSR)

ABSTRACT: A fluidised bed carbonising furnace for the production
of semicoke from low rank coals built in Rumania is
described and illustrated. Fluidisation is done by a
mixture of compressed air and combustion products of
a temperature of 600-650°C. Blast furnace gas is
used for firing; in addition a part of the coal is
burned in the fluidised bed. The output of furnace:
70 tons of dry semicoke per day. In the process the
volatile content of coal of 40% is decreased to 14-15%
in semicoke. By-products are as yet not collected but
burned. The semicoke produced is used for blending
with coal for the production of metallurgical coke in
stamp charged ovens. There are 2 figures.

Card 1/1

SITULIN, I.K.

Production of coke with the ramming of coke-oven charge. Koks i
khim. no.12:57-61 '60. (MIRA 13:12)

1. Gipromez.

(Rumania--Coke industry--Equipment and supplies)

L 46037-66

CMT(m)/MTR(t)/CPI

IJR(c)

JD/JT/JG

ACC NR: AT6022712

SOURCE CODE: UR/2848/66/000/041/0232/0238

AUTHORS: Krestovnikov, A. N.; Glazov, V. M.; Glagoleva, N. N.; Situlina, O. V.

ORG: Moscow Institute of Steel and Alloys, Department for Physico-chemical Investigation of Processes for the Manufacture of Semiconductor Materials and Pure Metals
(Moskovskiy institut stali i splavov, Kafedra fiziko-khimicheskikh issledovanii protsessov proizvodstva poluprovodnikovykh materialov i chistykh metallov)

TITLE: Investigation of viscosity and electrical conductivity of binary alloys of tellurium with germanium, tin, and lead in the liquid state

SOURCE: Moscow. Institut stali i splavov. Sbornik, no. 41, 1966. Fizicheskaya khimiya metallurgicheskikh protsessov i sistem (Physical chemistry of metallurgical processes and systems), 232-238

TOPIC TAGS: tellurium containing alloy, germanium containing alloy, lead containing alloy, tin containing alloy, electrical conductivity, fluid viscosity

ABSTRACT: The viscosity and electrical conductivity of the binary systems TeGe, TeSn, and TePb were investigated. The alloys were prepared after the method of L. Ya. Krol', A. Ya. Nashel'skiy, and M. D. Khlystovskaya (Zavodskaya laboratoriya, 1961, No. 2). The experimental procedure for the determination of viscosity and electrical conductivity is described by V. M. Glazov and S. N. Chizhevskaya (DAN SSSR, 1964, t. 154, No. 1). The experimental results are presented in tables and graphs (see Fig. 1). It was found that in order to retain a stoichiometric composition in Card J/2

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ACC NR: AT6022712

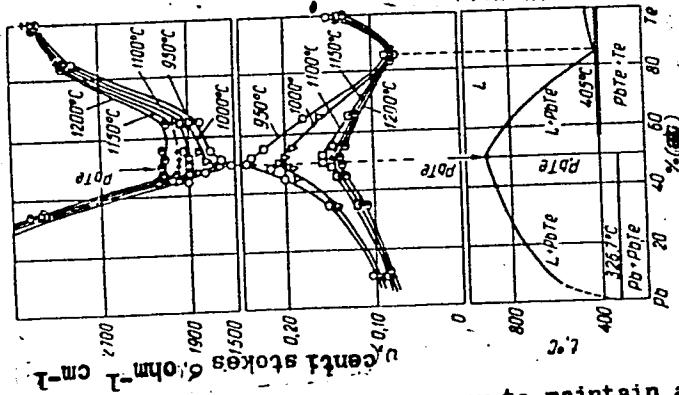


FIG. 1. Isotherms
for the viscosity
and electrical
conductivity of
melts for the
system lead-tellurium.

the systems GeTe and SbTe it is necessary to maintain an equilibrium vapor pressure of Te above the corresponding systems. The compound PbTe is relatively stable, but it is recommended that, when working with this compound, care is to be exercised in not exceeding its thermal stability limits. Orig. art. has: 1 table and 9 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 001

Card 2/2 HIT

MARCHENKO, N.A., SITYUK, V.F.

Potentiometric method of determining ammonia in a
copper ammonia electrolyte. Zav.lab. 26 no.7:793-795
'60.
(MIRA 13:7)

1. Khar'kovskiy politekhnicheskiy institut im. V.I. Lenina.
(Ammonia--Analysis) (Potentiometric analysis)

MIHAI-CU, T.; MIHAIUTIN, A.; MULCA, V.; MARTEANU, M.

Apparatus of measure and control of characteristic parameters
of functioning of drilling turbines. Petrol si gaze 15 no.8:
454-459 Ag'64

SIUCHNINKA, Helena

Mental disorders in rheumatism. Neurologia etc. polska 4 no.4:
401-405 July-Aug 54.

1. z Kliniki Psychiatrycznej Akademii Medycznej w Łodzi.

Kierownik: prof. dr med. E.Wilczkowski.

(RHEUMATISM, complications,
ment. disord.)

(MENTAL DISORDERS, etiology and pathogenesis,
rheum.)

SIUCHNINSKA, Helena

SIUCHNINSKA, Helena

Psychical disorders in rheumatic disease. Polskie arch. med.
wewnetrz. 24 no.3a:417-422 1954.

l. z Kliniki Psychiatrycznej Akademii Medycznej w Lodzi. Kierow-
nik; prof. dr E. Wilczkowski.)
(RHEUMATISM, psychology,
*psychical disord.)

SIUCHINSKA, Helena; KRUK, Maria

Miltown in psychiatric treatment. Polski tygod. lek. 14 no.3:
128-130 19 Jan 59.

1. Z Kliniki Psychiatrycznej A.M. w Lodzi; kierownik: prof. dr n.
med. E. Wilczkowski. Adres: Lodz, ul. Aleksandrowska 159.

(MEPROBAMATE, ther. use
neuroses & psychoses & adjuvant in psychother. of
alcoholism (Pol))

(NEUROSES, ther.
meprobamate (Pol))

(PSYCHOSIS, ther.
same)

(ALCOHOLISM, ther.
psychother. with adjuvant meprobamate (Pol))

(PSYCHOTHERAPY, in various dis.
alcoholism, adjuvant meprobamate (Pol))

SIUCHNINSKA, Helena; NAPIERALSKA, Miroslawa

Results of pharmacotherapy in the Psychiatric Clinic of the Academy of Medicine in Lodz and in the "Kochanowka" Hospital for Neurological and Mental Diseases in 1959. Polski tygod. lek. 16 no.14:517-523
3 Ap '61.

1. Z Kliniki Psychiatrycznej A.M. w Lodzi; kierownik: doc. dr med. Stanislaw Cwynar i ze Szpitala dla Psychicznie i Nerwowo Chorych w Kochanowcach; dyrektor: dr med. Michal Marzynski.

(MENTAL DISORDERS ther) (PSYCHOPHARMACOLOGY)

CWYNAR, Stanislaw; NAPIERALSKA, Miroslawa; POGORZELSKI, Wojciech;
SIUCHNINSKA, Helena

A report on results of the treatment with acid novocaine (H3)
in the Psychiatric Clinic of the Academy of Medicine in Lodz.
Neurol. neurochir. Psychiat. pol. 12 no.4:599-601 '62.
(PROCAINE) (MENTAL DISORDERS) (GERIATRICS)

CWYNAR, Stanislaw; PIONKOWSKI, Janusz; SIUCHNINSKA, Helena

Evaluation of the drug Trilafon produced by the company Ferrosan
according to experiences of the Psychiatric Clinic of the Academy
of Medicine in Lodz. Neurol. neurochir. psychiat. pol. 12 no.5:
751-752 '62.

(PERPHENAZINE)

(MENTAL DISORDERS)

SIUCHNINKA, Helena

Phenylpyruvic oligophrenia. Endokr. pol. 13 no.4:511-514 '62.

1. Klinika Psychiatryczna AM w Lodzi Kierownik: prof. dr S. Cwynar.
(MENTAL DEFICIENCY)

CWYNAR, Stanislaw; RYDZYNSKI, Zdzislaw; SIUCHNINSKA, Helena; WIERZBICKI,
Tadeusz

Our experience with the use of Nitoman in mental disorders. Pol. tyg.
lek. 17 no.17:633-635 23 Ap '62.

1. Z Kliniki Psychiatrycznej AM w Lodzi; kierownik: prof. dr med.
Stanislaw Cwynar i ze Szpitala im. Babinskiego w Lodzi; dyrektor:
lek. med. Tadeusz Wierzbicki.

(TRANQUILIZING AGENTS ther) (MENTAL DISORDERS ther)

CWYNAR, Stanislaw; NAPIERALSKA, Miroslawa; POGORZELSKI, Wojciech;
SIUCHNINSKA, Helena

Report on results of novocain-(H₃) acid treatment in the
Psychiatric Clinic of the School of Medicine in Lodz. Neurol
neurochir psych 12 no.4:599-601 Jl-Ag '62.

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CWYNAR, Stanislaw; PIONKOWSKI, Janusz; SIUCHNINSKA, Helena

Evaluation of the Trilafon drug (Perphenazine) produced by the
Ferrosan Works in the light of experiments made by the Psychiatric
Clinic of the Medical School in Lodz. Neurol neurochir psych 12
no.5:751-752 S-0 '62.

CWYNAR, Stanislaw; SIUCHNINKA, Helena; FRYDRIECHOWICZ, Tomasz; POSEL,
Zbigniew; WEYCHERT, Anna

The use of insidon (Geigy) in closed and open psychiatric
treatment. Neurol., neurochir., psychiat. Pol. 14 no.4:
671-676 Jl-Ag '64

1. Z Kliniki Psychiatrycznej Akademii Medycznej w Łodzi
(Kierowniki prof. dr. S. Cwynar) oś. z Wojewódzkiej Poradni
Zdrowia Psychicznego dla Województwa Łódzkiego (Dyrektor: dr.
med. H.Siuchninska).

SIUCHNINSKA, Helena

Results of the treatment of depressive states with geriocaine
(H-3), glutamic acid and preparation Placenta during the invoc-
lutional stage. Pol. tyg. lek. 19 no.10:349-352 2 Mr '64.

1. Z Kliniki Psychiatrycznej Akademii Medycznej w Lodzi (kierow-
nik: prof. dr. med. Stanislaw Gwynar).

WOLSKA, Janina; SIUCIĄK, Jadwiga

Parasitic protozoa of the alimentary tract of *Rana temporaria*
during its life cycle. *Acta parasit Pol* 12 no.19:303-307 '64.

1. Institute of Zoology of the Maria Skłodowska-Curie University,
Lublin.

5(0), 21(1)

POL/46-4-3-9/16

AUTHOR: Pasternak, Anatoli and Siuda, Andrzej

TITLE: Symposium of the Radiochemical Department of the Institute of Nuclear Research

PERIODICAL: Nukleonika, 1959, Vol 4, Nr 3, pp 323-327 (Poland)

ABSTRACT: Short communications from reports presented at the Symposium organized by the Radiochemical Department of the Institute of Nuclear Research of the Polish Academy of Sciences on December 2, 1958. Chief of Department is I. G. Campbell. The symposium was subdivided into 7 sections. For section 3 'Chemistry of Transurane' one report is given: A. Pasternak: Wspolstracanie plutonu z nosnikami organicznymi (Coprecipitation of Plutonium with Organic Carriers). Investigations have been made on the ratio of the various competitive processes for separation of Pu^{IV} with different pH between solvent, precipitation, and glass wall. Formation of a Pu^{IV}-alizaric complex could be observed.

SUBMITTED: December 1958
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AUTHORS:

Sierkierska, Krystyna E., Halpern, Aleksander, and
Siuda, Andrzej

TITLE:

The chemical effects of nuclear transformations of
polyvalent atoms in organic liquids

PERIODICAL:

Nukleonika, v. 5, no. 10, 1960, 635-646

TEXT: Most studies of chemical effects of thermal neutron capture in organic media have been concerned with hot halogens, little attention being given to polyvalent atoms. With the latter, the primary retention depends on the rupture of several bonds of the parent molecule. The recoil atom can reform more than one organic bond either in a single act or stepwise, each step differing in the region of the reaction and the energy of the recoil atom. In trivalent atoms, the primary retention may have three forms depending on whether one, two or three bonds are ruptured which, in turn, depend on the bond energy, the structure of the parent molecule and the feature of the nuclear transformation [Abstractor's note: It does not depend on the presence of a scavenger, on dilution,

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temperature etc.). The magnitude of the primary retention must, therefore, be determined in dilute solutions in the presence of a scavenger. The diluent must be such so as not to form the parent substance with the recoil atom. It can also be calculated theoretically by the "random walk" method. If neither of these methods is applicable, then the primary retention is found from the difference between total yield and the yield from the hot and thermal reactions. If the yield of a given product is decreased by the presence of a scavenger and is effected by temperature, then it may be assumed that the decrease in the yield equals the contribution of the thermal reaction to the total yield. Should the presence of a scavenger not affect the yield it may be assumed that the product is formed by a hot reaction or by bond rupture failure. Thus, the yield of a hot reaction is the difference between total yield in the presence of a scavenger and the yield of the primary retention. The yield of a hot reaction (e.g., investigation of phenylarsenic compounds) can be found by activating a given element as a simple inorganic compound (e.g., AsCl_3) in the presence of a scavenger, where the diluent (C_5H_6) can form the parent molecule with the recoil atom. Hot reactions may

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also include hot exchange processes. To discriminate between them, the yield must be measured in very dilute and concentrated solutions. The activity distribution between mono-, di- and tri-phenyl derivatives of arsenic, after neutron activation of triphenylarsenic (TFA) in benzene, were determined. The thermal reaction yields were found from the decrease in activity under the influence of a scavenger. Hot reaction yields were evaluated from results obtained using AsCl_3 in benzene.

From these results, the primary retentions were calculated. A similar procedure was adopted for tri-n-butyl phosphate (TBP). The results for all processes are summarized in Table 8.

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A. The contribution from various processes to the yield of individual products as the percentage of total arsenic activity

Type of process	Organic forms					
	tri-		di-		mono-	
	As	P	As	P	As	P
Bond rupture failure	1—2	4	2	26	1—6	30
Hot reactions	0	2	5		16	
Thermal reactions	14	15	16	1	0	0

B. The contribution from various processes to the yield of individual products as the percentage of this yield

Type of process	Organic forms					
	tri-		di-		mono-	
	As	P	As	P	As	P
Bond rupture failure	13	19	10	96	4	100
Hot reactions	0	9.5	21		96	
Thermal reactions	87	71	69	4	0	0

Table 8

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Primary retention contributes little to the formation of various derivatives; its contribution, however, increases with the decrease in the number of bonds. Hot processes contribute little to yield of tri-derivatives in both TPA and TBP. In di-derivatives, they are of intermediate importance, while in the formation of mono-derivatives they play a dominant role. Experimental results suggest that hot exchange mechanism can also occur, but the probability of this happening decreases as the number of bonds increases. Thermal reaction does not generally lead to the formation of non-derivatives; tri-derivatives, however, are predominantly formed by them. Di-derivatives may or may not be formed by thermal reaction, depending on viscosity and the diffusion coefficients of the radicals in the system. This is supported by the temperature dependence of the activity distribution of TBP in the presence of scavengers. The authors conclude that individual bonds are reformed by two distinct mechanisms: the first bond by a reaction in the hot region (region of high radical or excited molecule concentration), the third by a reaction in the diffuse region. The second bond can be reformed by both mechanisms depending on the properties of the system. It is also suggested that

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these mechanisms are applicable to other polyvalent atoms. There are 10 tables and 22 references: 8 Soviet-bloc and 14 non-Soviet-bloc. The 4 most recent references to English-language publications read as follows: R. A. Sharp: GA--617 (1958); J. C. W. Chien, J. E. Willard: J. Am. Chem. Soc. 79, 4872 (1957); A. G. Maddock, N. Sutin: Trans. Faraday Soc. 51, 184 (1955); J. E. Willard: Ann. Rev. Nucl. Sci. 3, 193 (1953).

ASSOCIATION: Institute of Nuclear Research, Warszawa, Department of Radiochemistry X

SUBMITTED: September, 1960

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SIUDA, Andrzej

Formation of chemical products following $^{31}\text{P}(\text{n},\gamma)^{32}\text{P}$ reaction
in tri-, di-, and mono-n-butyl phosphates. Nukleonika 7 no.10:
623-634 '62.

1. Institute of Nuclear Research, Department of Radiochemistry,
Polish Academy of Sciences, Warsaw.

SINDA, A.

paper chromatography and paper electrophoresis of some organic
and phosphorus compounds. Great chem acta 35 no.4 . 19-215
'63.

1. Department of Radiochemistry, Institute of Nuclear Research,
Warsaw, Poland.

L 14629-66 ETC(f)/EWG(m)/EWP(j)/T DS/RM
ACC NR: AP6008159 SOURCE CODE: P0/0046/65/010/007/0459/0461

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B

AUTHOR: Siuda, Andrzej

ORG: Department of Radiochemistry, Institute of Nuclear Research, Warsaw-Zeran

TITLE: Separation of some inorganic and phenyl phosphorus compounds by paper chromatography and paper electrophoresis 1,4,5

SOURCE: Nukleonika, v. 10, no. 7, 1965, 459-461

TOPIC TAGS: paper chromatography, electrophoresis, nonmetallic organic derivative, phosphorus compound, organic phosphorus compound, cyclic group

ABSTRACT: Paper chromatographic and paper electrophoresis methods for the separation and identification of inorganic and phenyl derivatives of phosphorus were developed. Triphenylphosphine, diphenylphosphonic acid, phenylphosphonous acid, phenylphosphonic acid, ammonium orthophosphate, sodium hypophosphate, potassium pyrophosphate, sodium orthophosphate, and sodium hypophosphate were studied. Paper chromatography was carried out with the ascending technique on paper pretreated with 2% versene. The solvent used was n-propanol and 25% ammonia. Paper electrophoresis was carried out using paper soaked in ammonium

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oxalate at pH 5.5 and pressed between silicon-treated glass plates. Results are shown in figures. Orig. art. has 2 figures and 1 table. NA

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 006

Card 2/2 *AC*

ŁOJKINSKA, Alicja; MIUDA, Małgorzata

Influence of hydrolysis on the formation of silver cyanate complexes. Roczn chemii 38 no. 1:117-121 '64.

I. Department of Inorganic Chemistry, Nicolaus Copernicus University,
Toruń.

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SIUDA, I.P.—"Concerning the Efficiency of Systems of Operation of Long Electrical Transmission Lines." Cand Tech Sci, Moscow, Order of Lenin Power Engineering Institute V.M. Molotov, 5 Feb 54. (Vechernaya Moskva 25 Jan 54)

S.: Sum 168 22 July 1954

SICDA, I.P., kandidat tehnicheskikh nauk.

Calculating the stationary operating conditions of long-distance
electric power transmission lines. Trudy NPI 33:57-65 '56.
(MLRA 10:2)

(Electric lines)

VENIKOV, V.A., doktor tekhn.nauk, prof.; ZHUKOV, L.A., kand.tekhn.nauk, dots.;
SIUDA, I.P., kand.tekhn.nauk, dots.

Making the characteristics of long-distance electric lines more exact
by evaluating the efficiency of their performance. Trudy MEI no.26:
(MIRA 11:9)
75-96 '57.
(Electric lines)

Silka, I.P.,

the direction of the Institute of minimum loss conditions
in electric power systems. Min. izv. vys. ucheb. zav.;
(I.I. 14:2)

2. The Ministry of the People's Economy of the Russian Federation
and the Ministry of Electric Power and Electrical Engineering
of the USSR.

(License for distribution)

SIUDA, Il'ya Petrovich, kand.tekhn.nauk, dotsent

Regulation of voltage in a passive four-terminal network using
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elektromekh. 3 no.12:40-45 '60. (MIRA 14:5)

1. Kafedra elektricheskikh stantsiy, setey i sistem Novocherkasskogo
politekhnicheskogo instituta.
(Voltage regulators)
(Electric networks)

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tekhn. nauk Energ. i avtom no.1:3-11 Ja-F '61. (MIRA 14:3)
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SIUDA, I.P.; BOGUSH, A.G.

Concerning the equivalent circuits of power auto~~transformers~~ ^{transformers}.
Izv. vys. ucheb. zav., elektromekh. 4 no.10:15-23 '61.
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Problems concerning the design of long-distance compensated
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no.5:7-14 My '62. (MIRA 15:5)

1. Novocherkasskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy
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Calculation of compensating devices of long-distance power
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